Docket No.: 2001365.00123US2
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Satya Kamineni et al.	Confirmation No.:	7942
Application No.:	10/565,880	Art Unit:	3781
Filed:	August 18, 2006	Examiner:	S. A. Weaver
Title:	CONTAINER EXHIBITING IMPROVED TOP LOAD PERFORMANCE		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

I, Satya Kamineni, hereby declare and state as follows:

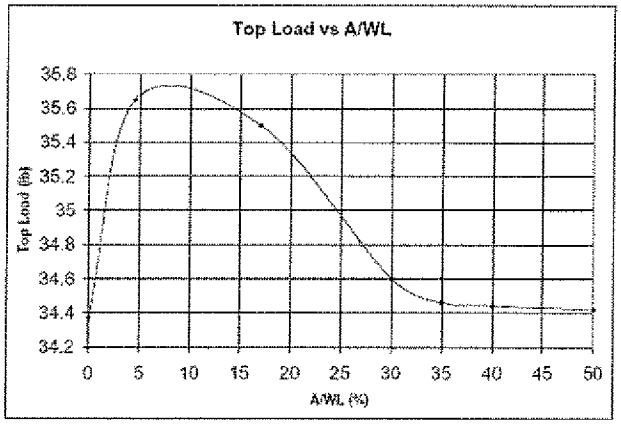
1. I am a Senior Design Engineer and have been employed by Constar International Inc. in Alsip, Illinois since January 2001. I have a Master of Science degree from University of Toledo.

2. I am a co-inventor of the subject matter claimed in the patent application identified above, ("the present application"). I understand the claims pending in the present application to be directed to a plastic container comprising a finish portion and a generally cylindrical main body portion. The main body portion comprises a sidewall having a plurality of generally vertical ribs and a plurality of generally horizontal wave-shaped ribs defined therein. At least one of the generally horizontal wave-shaped ribs has an amplitude that is within a range of about 4.5 percent to about 30 percent of its wavelength (which may be referred to as the amplitude to wavelength ratio or "A/WL"), and at least one of generally vertical ribs intersects with more than one of the generally horizontal wave shaped ribs, whereby enhanced strength characteristics are imparted to the container.

3. I have been informed that claims of the present application have been rejected as being obvious over U.S. Patent Application Publication No. 2003/0080135 A1 ("Bezek") in view of, in various combinations, JP 9-240647 ("Yasufumi"), U.S. Patent No. 3,357,593 ("Sears"), and U.S. Patent No. 5,988,417 ("Cheng").

4. I have been informed that the Examiner has deemed the claimed range of amplitude to wavelength ratio of the horizontal wave-shaped ribs to be an obvious matter of design choice. However, the amplitude to wavelength ratio actually has an effect on the top load strength of the container. Top load strength is a measurement that is used routinely by container designers to quantify the strength of containers. It provides an indication of the maximum vertical force that may be applied to the top of the container without causing significant deformation of the container.

5. I have prepared simulation models of several container designs having horizontal wave-shaped ribs with different amplitude to wavelength ratios (A/WL), as shown in the outline drawings in the attached Appendix. These models were used to perform linear buckling analysis using software called ABAQUS, version 6.7, by Simulia. I have also used SDRC IDEAS previously to perform such analyses, and I have found that both programs gave approximately the same results. Using these models, I have computed top load strength for several values of amplitude to wavelength ratio (A/WL), as shown in the following chart and table:



A/WL (%)	Topload (lb)
0.0%	34.4
4.5%	35.7
17.0%	35.5
30.0%	34.6
35.0%	34.5
40.0%	34.4
50.0%	34.4

6. As can be seen from this simulated data, the claimed range of amplitude to wavelength ratio of 4.5% to 30% provides increased top load strength. Thus, this data demonstrates that the claimed range is not merely an arbitrary design choice.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent in which this declaration is made.

Date: 5/14/08.

Satya Kamineni

Satya Kamineni

APPENDIX – Simulated Designs